

Key Points

- We Did What We Said We Would Do
- Our Solutions Are Working Well
- Our Support Helped To Protect Your Investment



MUNICIPAL
BUILDING



DEPARTMENT OF PUBLIC
WORKS



POOL HOUSE

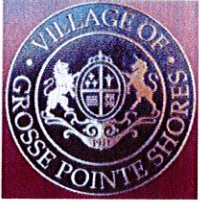


Honeywell

GUARANTEED SAVINGS PERFORMANCE
CONTRACT

October 16, 2018





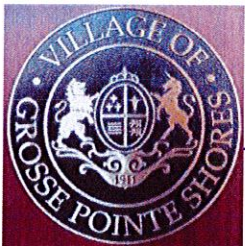
Agenda

- ▶ Revisit Performance Contracting
- ▶ Scope of Work Review
- ▶ Financial Analysis
- ▶ Energy Savings Results
- ▶ Open Discussion

Honeywell

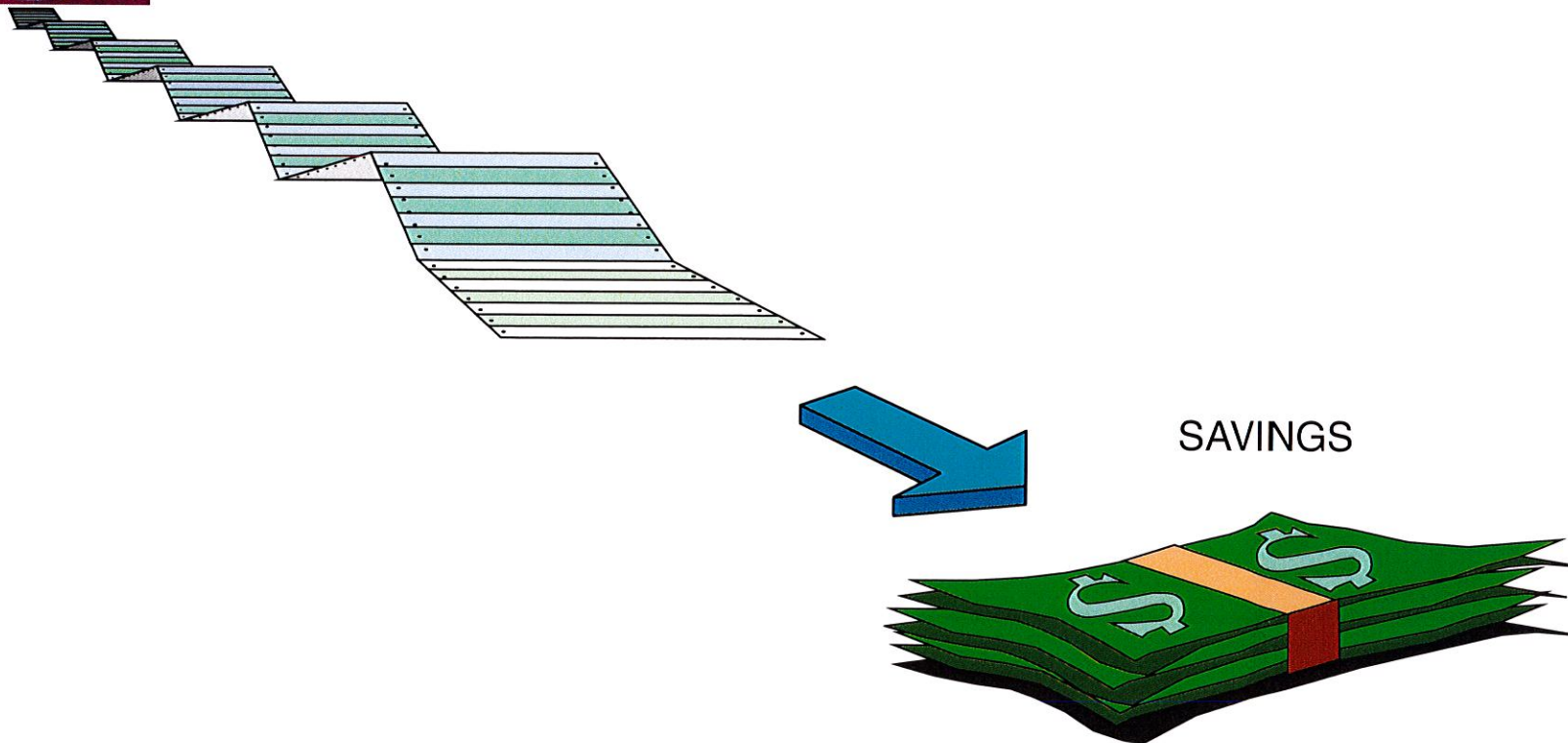
Proven Track Record and Local
Performance Contracting References
With 100% Accountability for Results





What is Performance Contracting

RE-DIRECT EXCESS UTILITY AND REPAIR COSTS



Design/Build Project Implementation with Energy Savings Guarantee

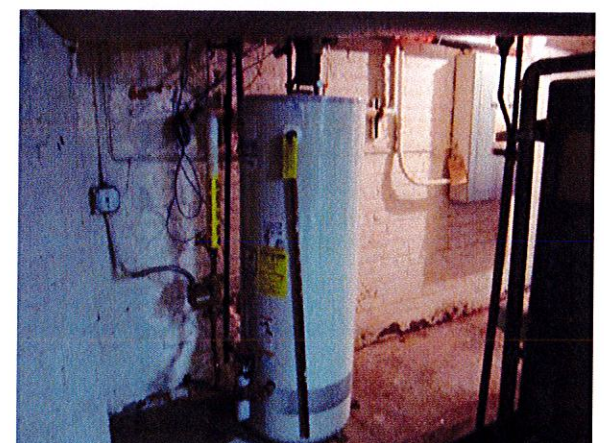
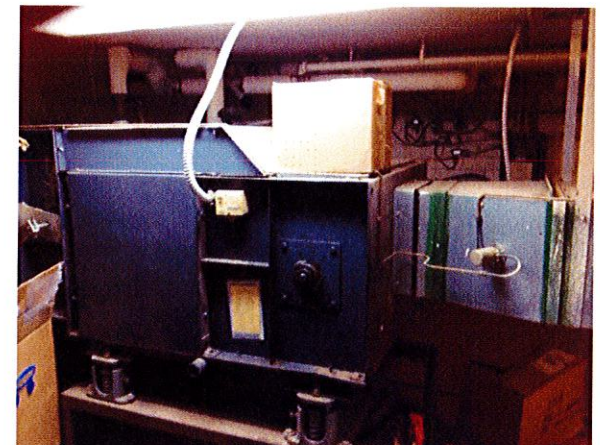
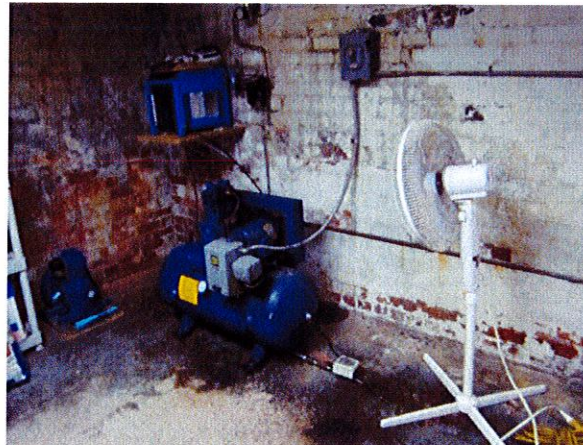
Honeywell

Proven Track Record and Local
Performance Contracting References
With 100% Accountability for Results





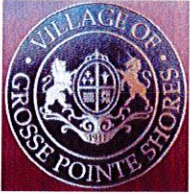
Pre Project Conditions City Hall



Honeywell

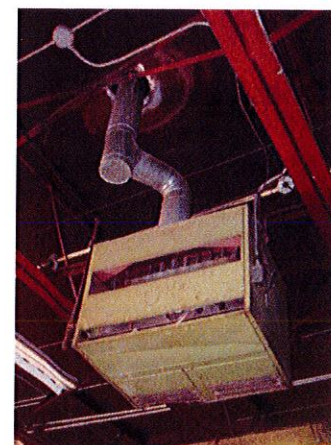
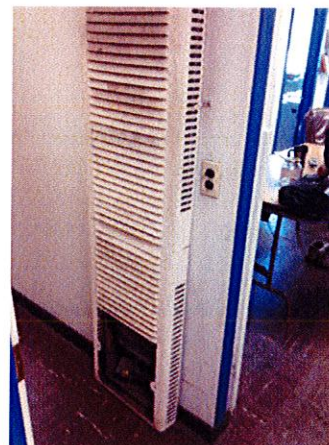
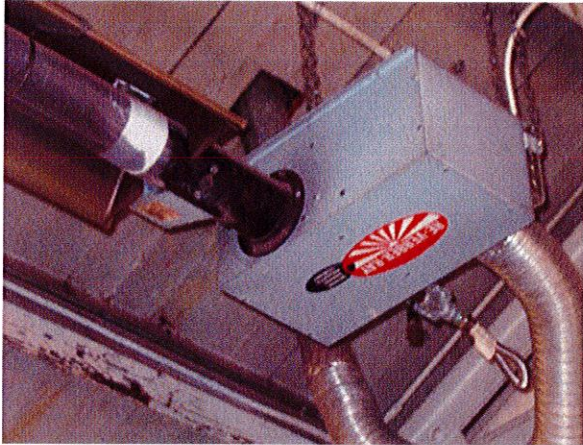
Proven Track Record and Local
Performance Contracting References
With 100% Accountability for Results





Pre Project Conditions

DPW



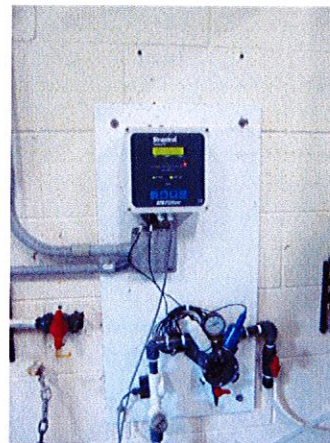
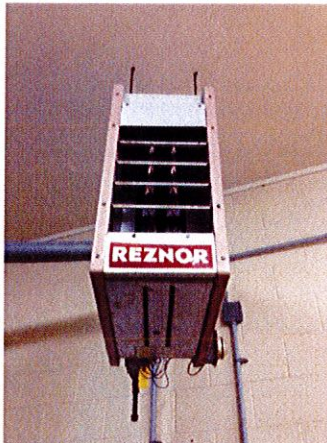
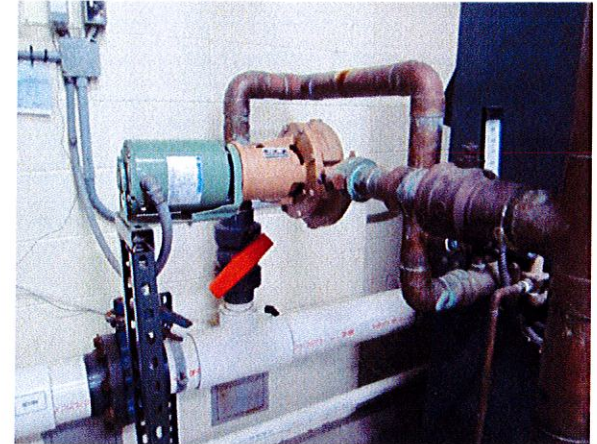
Honeywell

Proven Track Record and Local
Performance Contracting References
With 100% Accountability for Results





Pre Project Conditions Pool House



Honeywell

Proven Track Record and Local
Performance Contracting References
With 100% Accountability for Results



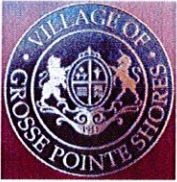
HVAC SYSTEM REPLACEMENT SUMMARY

GROSSE POINTE SHORES

BUILDING				MAJOR HVAC EQUIPMENT				
No.	NAME	YEAR BUILT*****	GROSS AREA (Sq.Ft.)	DESCRIPTION	QUANTITY (#)	ACTUAL **	SERVICE LIFE *** (years)	REMAINING LIFE (years)
1	City Hall		22,050					
		1983		Hot Water Boiler	1	1,200 MBH	25	0
		2008		Condenser(s)	1	10 ton	20	16
		2008		Condenser(s)	1	12.5 ton	20	16
		1983		Air Handling Unit(s)	1	5,000 cfm	18	0
		1983		Air Handling Unit(s)	1	4,500 cfm	18	0
		1983		Return Fan	1	3/4 hp	18	0
		1983		Return Fan	1	3/4 hp	18	0
		1983		Air Handling Unit(s)	1	1,265 cfm	18	0
		2009		Compressor	1	1 hp	10	7
		2006		Domestic Hot Water Heater(s)	1	50 gal	15	9
		1983		Circulating Pump	2	1.5 hp	10	0
		1983		Cabinet Unit Heaters	4	60 MBH	20	0
		1983		Hydronic Baseboard Heating	1	500 lin. ft.	25	0
		1983		Pneumatics	1		20	0
2	DPW		10,000					
		1983		Gas Unit Heater(s)	4	65,000 BTU	13	0
		1983		Wall Furnace(s)	2	30,000 BTU	15	0
		2002		Infrared Radiant Heater(s)	1	75,000 BTU	20	10
		2000		Electric Water Heater	1	20 gal	15	3
		2006		Window Unit	1	8 MBH	10	4
		1954		Municipal Water Pumps	2	160 kW	25	0
3	Pool House & Pool Equipment Building		4,100					
		1993		Domestic Hot Water Boiler	1	900 MBH	25	6
		1985		Circulating Pump(s)	2	1.0 hp	10	0
		1985		Air Handling Unit(s)	1	2,380 cfm	18	0
		1987		Pool Boiler	1	2,100 MBH	30	5
		1993		Circulating Pump	1	0.5 hp	10	0
		1993		Pool Pumps	2	15.0 hp	20	1
TOTAL			36,150		37		18.0	0.0



SCOPE OF WORK	VILLAGE HALL	DPW	POOL HOUSE	STREET LIGHTS	DECORATIVE LIGHTS	GROSSE POINTE SHORES HOMES	PARKS
Building Envelope Tune-Up	✓	✓	✓				
Boiler Replacement / Jockey Boiler	✓		✓				
HVAC Modifications / Improvements	✓	✓	✓				
Pool Pump VFD			✓				
Liquid Pool Cover			✓				
Temperature Control Upgrade	✓	✓	✓				
Municipal Pumps Replacement	✓						
AMR Water Meter Installation						✓	
Lighting Upgrades							
- Fluorescent / Incandescent Retrofit	✓	✓	✓				
- Lighting Controls	✓	✓	✓				
- Metal Halide Luminaire to Pulse Start Metal Halide					✓		✓
- Metal Halide Luminaire to LED					✓		✓
- HPS TO LED Retrofit				✓			



Project Cash Flow

Performance Contract Cash Flow 15 Year Program

Self Funding Project Cost	\$ 3,158,740
Guaranteed Energy Savings	\$39,504
Guaranteed Operational Savings	\$145,458
Support Services	\$9,878
Estimated Lease Rate	3.00%
Payments per Year	2
Inflation Rate	4.00%

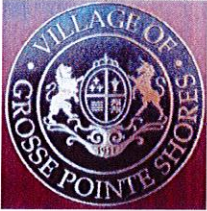
INSTALLMENT PURCHASE AGREEMENT

Year	ANNUAL INVESTMENT			ANNUAL SAVINGS			CASHFLOW	
	Installment Purchase Payment	Support Services	Total Annual Costs	Energy Savings	Operational Savings	Total Annual Savings	Net Annual Cashflow	Net Cashflow
0						73,985	\$73,985	\$73,985
1	(263,055)	(9,878)	(272,933)	39,504	145,458	184,962	(\$87,971)	(\$13,986)
2	(263,055)	(10,273)	(273,328)	41,084	151,276	192,360	(\$80,967)	(\$94,953)
3	(263,055)	(10,684)	(273,739)	42,728	157,327	200,055	(\$73,684)	(\$168,637)
4	(263,055)		(263,055)	44,437	163,620	208,057	(\$54,998)	(\$223,635)
5	(263,055)		(263,055)	46,214	170,165	216,379	(\$46,675)	(\$270,310)
6	(263,055)		(263,055)	48,063	176,972	225,035	(\$38,020)	(\$308,330)
7	(263,055)		(263,055)	49,985	184,051	234,036	(\$29,019)	(\$337,349)
8	(263,055)		(263,055)	51,985	191,413	243,397	(\$19,657)	(\$357,007)
9	(263,055)		(263,055)	54,064	199,069	253,133	(\$9,921)	(\$366,928)
10	(263,055)		(263,055)	56,227	207,032	263,259	\$204	(\$366,724)
11	(263,055)		(263,055)	58,476	215,313	273,789	\$10,734	(\$355,990)
12	(263,055)		(263,055)	60,815	223,926	284,741	\$21,686	(\$334,304)
13	(263,055)		(263,055)	63,247	232,883	296,130	\$33,075	(\$301,229)
14	(263,055)		(263,055)	65,777	242,198	307,975	\$44,921	(\$256,308)
15	(263,055)		(263,055)	68,408	251,886	320,294	\$57,240	(\$199,069)
16				71,144	261,962	333,106	\$333,106	\$134,037
Totals	(3,945,821)	(30,835)	(3,976,656)	862,156	3,174,553	4,110,694	\$134,037	\$134,037

Honeywell

Proven Track Record and Local
Performance Contracting References
With 100% Accountability for Results





Utility Savings

Cost Savings Summary

		Utility Cost Savings			Operating Cost		Total Cost Savings		
		Guaranteed	Verified	Variance %	Guaranteed	Verified	Guaranteed	Verified	Variance %
Install	10/13-06/14		\$53,118					\$53,118	
Year 1	07/14-06/15	\$39,504	\$60,313	153%	\$145,458	\$145,458	\$184,960	\$205,771	111%
Year 2	07/15-06/16	\$39,504	\$59,535	151%	\$145,458	\$145,458	\$184,960	\$204,993	111%
Year 3	07/16-06/17	\$39,504	\$58,726	149%	\$145,458	\$145,458	\$184,960	\$204,184	110%
TOTAL		\$118,512	\$231,692	196%	\$145,458	\$145,458	\$554,880	\$668,066	120%

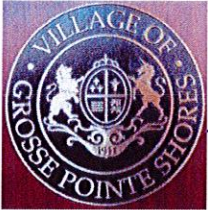
Utility Savings Summary

		Annual kWh Savings		Annual Gas Savings (MMBTU)	
		Guaranteed	Verified	Guaranteed	Verified
Install	10/13-06/14		289,045		
Year 1	07/14-06/15	358,019	481,201	704	1,843
Year 2	07/15-06/16	358,019	476,834	704	771
Year 3	07/16-06/17	358,019	469,403	704	728
TOTAL		1,074,057	1,716,483	704	3,342

Honeywell

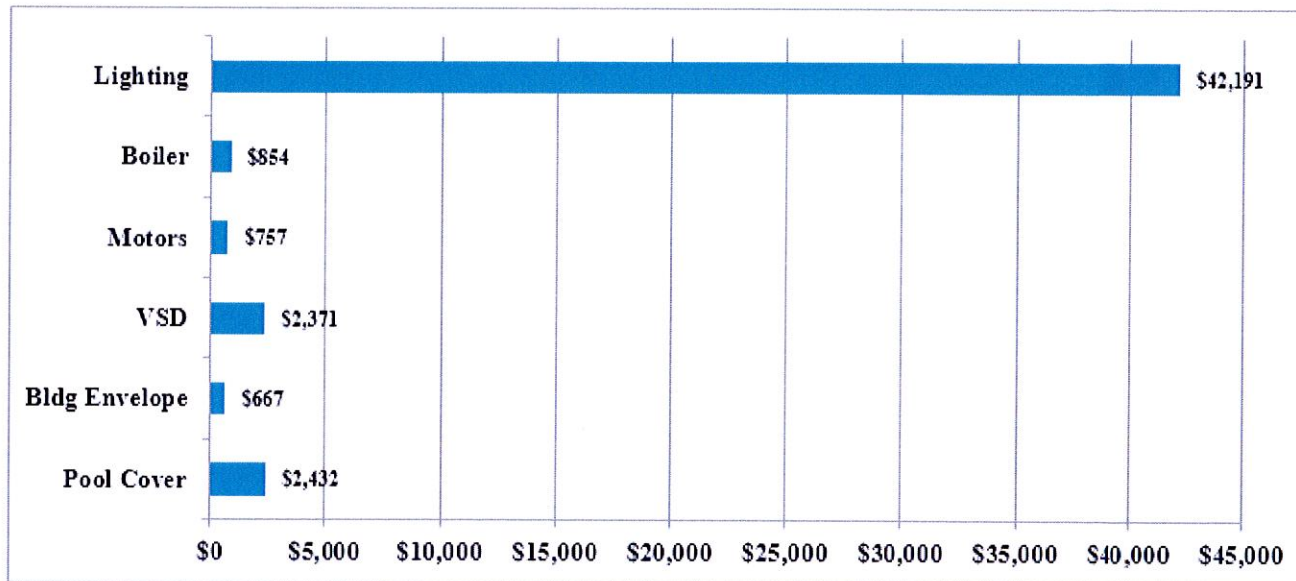
Proven Track Record and Local
Performance Contracting References
With 100% Accountability for Results





Utility Savings

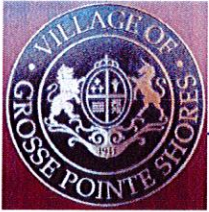
Savings per ECMs



Honeywell

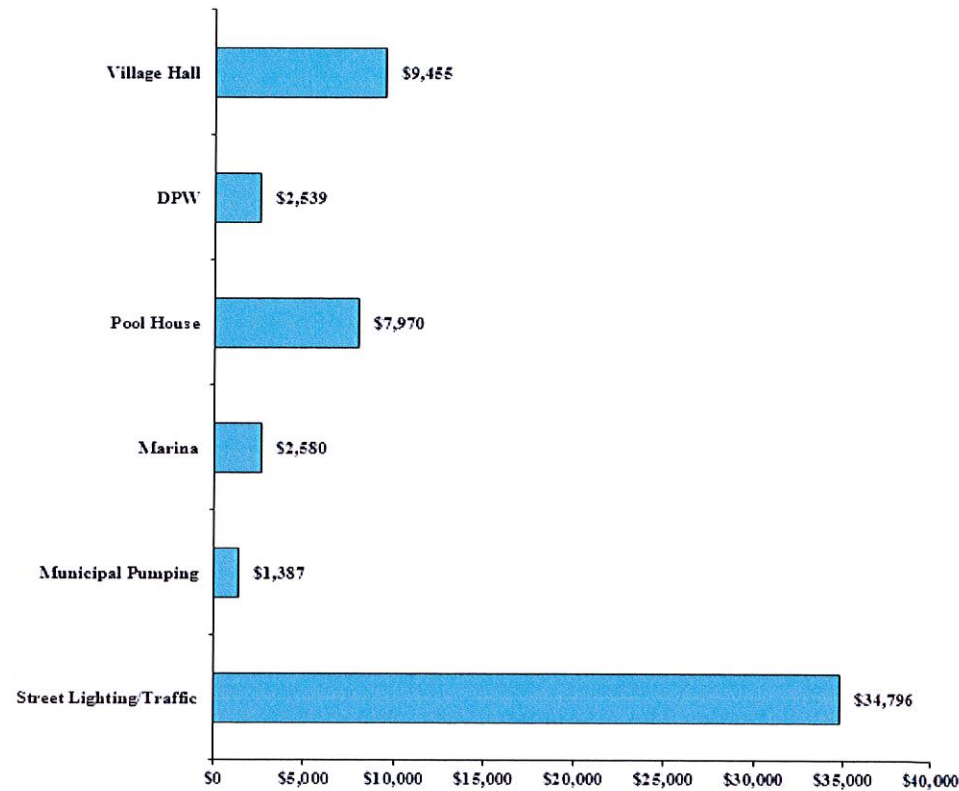
Proven Track Record and Local
Performance Contracting References
With 100% Accountability for Results





Utility Savings

Savings per Locations



Honeywell

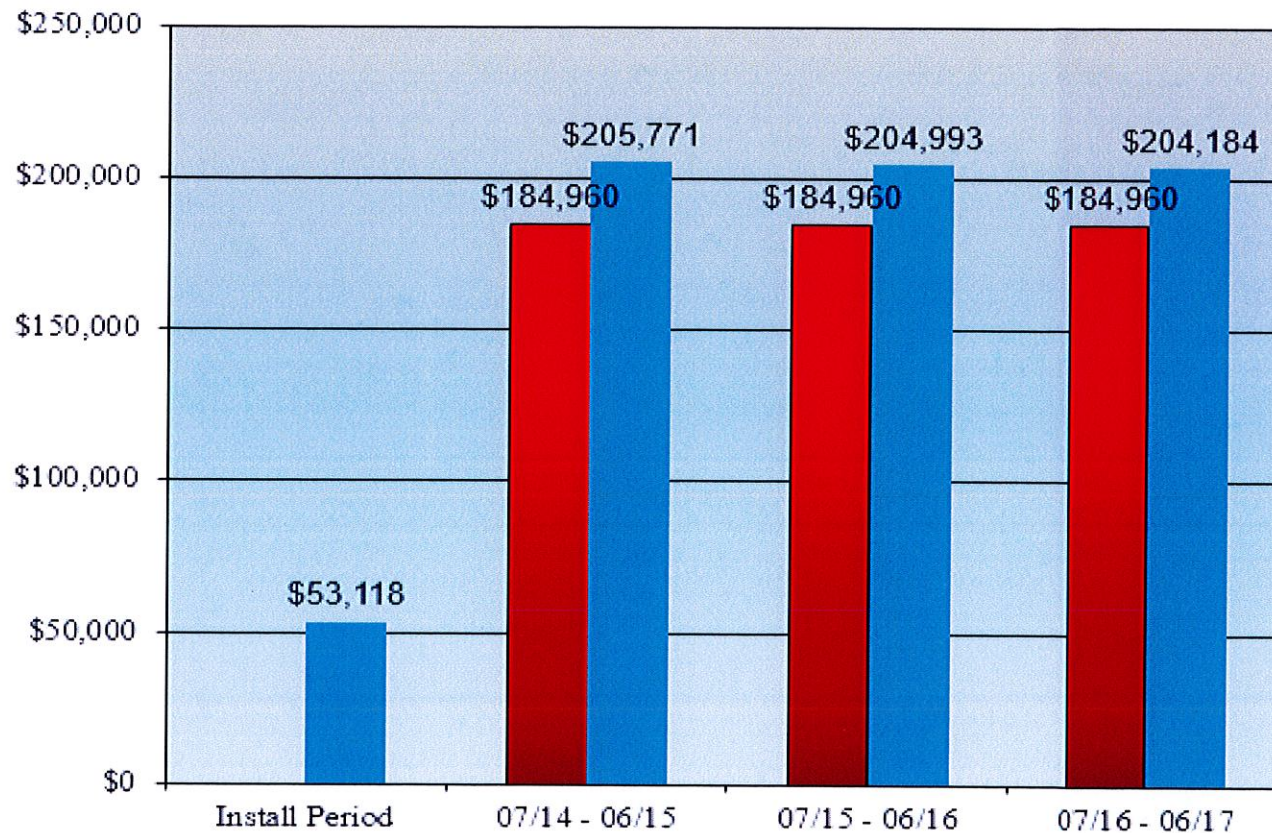
Proven Track Record and Local
Performance Contracting References
With 100% Accountability for Results





Energy Savings Results

**Annual Energy Guarantee vs.
Cost Avoidance**

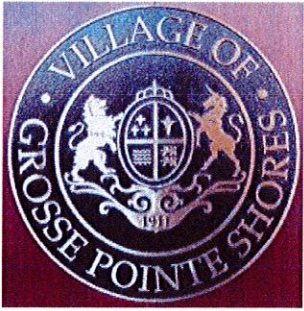


Honeywell

Proven Track Record and Local
Performance Contracting References
With 100% Accountability for Results

■ Annual Guarantee ■ Actual Cost Avoidance





Open Discussion

Honeywell

Proven Track Record and Local
Performance Contracting References
With 100% Accountability for Results

